



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2021-0302; Project Identifier MCAI-2020-01596-R; Amendment 39-21618; AD 2021-13-13]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Leonardo S.p.a. Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all Leonardo S.p.a. Model AW189 helicopters. This AD was prompted by the identification of misleading information in the emergency procedure for the “1(2) FUEL LOW” caution message. This AD requires revising the existing Rotorcraft Flight Manual (RFM) for your helicopter. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://customerportal.leonardocompany.com/en-US/>. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0302.

#### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0302; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the European Union Aviation Safety Agency (EASA) AD, any comments received, and other information. The street address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Mitch Soth, Flight Test Engineer, Southwest Section, Flight Test Branch, Compliance & Airworthiness Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email [mitch.soth@faa.gov](mailto:mitch.soth@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Leonardo S.p.a. Model AW189 helicopters. The NPRM published in the *Federal Register* on April 19, 2021 (86 FR 20336). In the NPRM, the FAA proposed to require revising page 3-118 of Section 3, Emergency and Malfunction Procedures, of the existing RFM for your helicopter to add remaining flight times (minutes) based on TQ value (%) and conditions that further reduce the remaining flight times. The NPRM was prompted by EASA AD 2019-0136, dated June 11, 2019 (EASA AD 2019-0136), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Leonardo S.p.A. (formerly Finmeccanica Helicopter Division, AgustaWestland) Model AW189 helicopters. EASA advises of the identification of misleading information in the AW189 RFM Emergency procedure associated with the “1(2) FUEL LOW” caution message. In particular, the procedure at issue instructs the pilot to land as soon as practicable within 20 minutes. However, this remaining flight time is guaranteed only if a constant torque value of 50% is maintained. The correct time limit depends on the fuel consumption at different engine power settings. Accordingly, EASA AD 2019-0136 requires amending section 3 of the AW189 RFM, “Emergency and malfunction procedures,” informing all

flight crews, and thereafter, operating the helicopter accordingly. This condition, if not addressed, could result in the wrong estimation of the remaining flight time in a low fuel condition, possibly resulting in an uncommanded engine in-flight shut-down and forced landing, with consequent damage to the helicopter or injury to occupants.

EASA initially issued EASA AD 2019-0103, dated May 9, 2019 (EASA AD 2019-0103), to address this unsafe condition. EASA issued EASA AD 2019-0136 to supersede EASA AD 2019-0103 to require using the corrected amendment of the AW189 RFM.

## **Discussion of Final Airworthiness Directive**

### **Comments**

The FAA received no comments on the NPRM or on the determination of the costs.

### **Conclusion**

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these helicopters. Since the FAA issued the NPRM, the website address for Leonardo S.p.a. has changed. This AD updates that contact information to obtain service documentation. Additionally, the FAA made edits to clarify that AW189 – RFM, Document No. 189G0290X002, Record of Temporary Revisions, TR No. 3-1, Revision A, dated May 24, 2019 (TR 3-1 Rev A) is included in Annex A of Leonardo Helicopters Document No. 189G0257A061, “AW189 – MAF for EASA RFM Issue 2 TR 3-1, Low Fuel Caution Procedure,” Issue B, dated May 22, 2019. This AD is otherwise adopted as proposed in the NPRM.

## **Related Service Information Under 1 CFR Part 51**

The FAA reviewed TR 3-1 Rev A, which specifies remaining flight times (minutes) based on TQ value (%) if the XFEED is closed or if the XFEED is open with both fuel pumps ON. TR 3-1 Rev A also specifies that the remaining flight times

(minutes) are further reduced if the XFEED is open, both fuel pumps are ON and one tank has emptied, and the 2 engines are supplied from the remaining tank.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Differences Between this AD and the EASA AD**

EASA AD 2019-0136 requires revising the existing RFM for your helicopter within 14 days, whereas this AD requires that action within 14 hours time-in-service after the effective date of this AD instead. EASA AD 2019-0136 requires removing the RFM changes previously required by EASA AD 2019-0103, whereas this AD does not.

#### **Costs of Compliance**

The FAA estimates that this AD affects 4 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Revising the existing RFM for your helicopter takes about 0.25 work-hour for an estimated cost of \$21 per helicopter and \$84 for the U.S. fleet.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2021-13-13 Leonardo S.p.a.:** Amendment 39-21618; Docket No. FAA-2021-0302;  
Project Identifier MCAI-2020-01596-R.

**(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER  
DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Leonardo S.p.a. Model AW189 helicopters, certificated in any  
category.

**(d) Subject**

Joint Aircraft Service Component (JASC) Code: 7300, Engine fuel and control.

**(e) Unsafe Condition**

This AD was prompted by the identification of misleading information in the  
emergency procedure for the “1(2) FUEL LOW” caution message. The FAA is issuing  
this AD to prevent the wrong estimation of the remaining flight time in a low fuel  
condition. The unsafe condition, if not addressed, could result in an uncommanded

engine in-flight shut-down and forced landing, with subsequent damage to the helicopter or injury to the occupants.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

Within 14 hours time-in-service after the effective date of this AD, revise page 3-118 of Section 3, Emergency and Malfunction Procedures, of the existing Rotorcraft Flight Manual for your helicopter by adding page 3-118, Temporary Revision 3-1 Rev. A, of AW189 – RFM, Document No. 189G0290X002, Record of Temporary Revisions, dated May 24, 2019, as contained in Annex A of Leonardo Helicopters Document No. 189G0257A061, “AW189 – MAF for EASA RFM Issue 2 TR 3-1, Low Fuel Caution Procedure,” Issue B, dated May 22, 2019 (TR 3-1 Rev A). Using a different document with information identical to the information in page 3-118 of TR 3-1 Rev A is acceptable for compliance with the requirement of this paragraph. This action may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with § 43.9(a)(1) through (4) and § 91.417(a)(2)(v). The record must be maintained as required by § 91.417, § 121.380, or § 135.439.

**(h) Special Flight Permits**

Special flight permits are prohibited.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards

district office/certificate holding district office.

**(j) Related Information**

(1) For more information about this AD, contact Mitch Soth, Flight Test Engineer, Southwest Section, Flight Test Branch, Compliance & Airworthiness Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email [mitch.soth@faa.gov](mailto:mitch.soth@faa.gov).

(2) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD 2019-0136, dated June 11, 2019. You may view the EASA AD at <https://www.regulations.gov> in Docket No. FAA-2021-0302.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) AW189 – RFM, Document No. 189G0290X002, Record of Temporary Revisions, dated May 24, 2019, as contained in Annex A of Leonardo Helicopters Document No. 189G0257A061, “AW189 – MAF for EASA RFM Issue 2 TR 3-1, Low Fuel Caution Procedure,” Issue B, dated May 22, 2019.

(ii) [Reserved]

(3) For service information identified in this AD, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://customerportal.leonardocompany.com/en-US/>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the



availability of this material at NARA, email: [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to:

<https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on July 9, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2021-15300 Filed: 7/19/2021 8:45 am; Publication Date: 7/20/2021]